

## REMARKS

Applicants acknowledge the 1<sup>st</sup> Action of 29 MAY 2003 and request reconsideration of the application as amended.

In accordance with the requirement made in Par. 1 of the Action, proposed corrections to FIGS. 4-8, adding PRIOR ART legends, are enclosed for consideration & approval by the Office.

In accordance with the requirement made in Par. 2 of the Action, a more descriptive title has been provided, emphasizing a feature described in that portion of the specification beginning at page 11, line 20, through page 13, line 7.

In response to Par. 3 of the Action, the subject matter of the various claims was commonly owned by Advanced Display Inc. (see Assignment recorded at Reel 12650, Frame 0358) at the time the invention(s) was or were made, which was at least as early as the 28 FEB. 2001 filing date of Japanese priority application 2001-054854.

### CLAIM REJECTIONS UNDER SECTION 103

The Office has rejected all of claims 1-6 under sec. 103, based upon FUJIHARA et al/SHARP U.S.P. 5,771,083 (corresponding to Japanese application **07-267 307** filed 16 OCT. 1995) combined with ELLIS/HONEYWELL U.S.P. 5,546,204 (resulting from US application 249,408 of 26 MAY 1994). Paragraph 5 of the Action, lines 7-8, contend that the FUJIHARA contact holes 13 connect first and second metallic lines to a terminal electrode. FIG. 2 only shows hole 13 connecting source line 3/drain electrode 7 to pixel electrode 5; no connection to gate electrode 2c (second

metallic line) is shown in FIG. 2. Applicants see no discussion in FUJIHARA of a terminal electrode, nor of trimming or chamfering an edge to cut off a short-circuit ring in such a way as to minimize exfoliation, as described at present specification page 12, lines 10-11. Applicants have amended main claim 1 to emphasize this feature discussed in the specification and respectfully submit that the claimed structure distinguishes over any attempted combination of FUJIHARA with ELLIS.

None of the cited art suggests the structure of the terminal forming areas (terminal electrode and first and second metallic line) recited in claim 1 of the present application.

FUJIHARA *did not realize* that electrostatic discharge during fabrication poses a hazard to the thin film transistors (TFTs), as discussed in the specification at page 2, lines 6-9, and therefore did not provide a separate "terminal electrode" to ground the TFTs until the final fabrication stage. While the transistors are grounded, any electrostatic discharge which occurs will be harmless. Of course, the grounding connection must be trimmed or otherwise removed (24), in order to make the transistors function as switches to turn pixels of the LCD on and off. Pages 11-13 emphasize that the present invention improves LCD manufacturing yield by preventing the trimming process (see FIG. 3b, numeral 24) from producing small metal pieces or strips which would otherwise tend to cause short-circuits between components. Page 12, lines 8-14, explain that having gate insulating layer 4 covering metal line/layer 3 minimizes any peeling of line 3 during the chamfering step, so that formation

of little strips is avoided. This is the point of the recitation, in dependent claims 3-6, that the second metallic line (3) is arranged in a layer lower than the first metallic line (9 in FIG. 3b). The insulator 4 (preferably silicon nitride) tends to suppress peeling of metal 3 underneath.

Similarly, ELLIS (apparently cited only to show placement of liquid crystal between two substrate layers) does not suggest the electrostatic discharge during fabrication is a problem, nor what structure or fabrication methods would avoid the risks of (A) electrostatic discharge in the transistors and (B) shorts.

#### CONCLUSION

In view of the foregoing amendments and arguments, it should be apparent that the improved structure recited in main claim 1, and incorporated by reference in dependent claims 2-6, patentably distinguishes over FUJIHARA/SHARP, ELLIS/HONEYWELL, and the other art of record, taken singly or in combination. Passage of the application to allowance is therefore solicited. If the Examiner notes any remaining informalities, a telephone call to Applicants' counsel is invited.

Respectfully submitted,

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